Case No. 2024-1097

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

GOOGLE LLC,

Plaintiff-Appellee,

v.

SONOS, INC.,

Defendant-Appellant.

Appeal from the United States District Court for the Northern District of California, Case Nos. 3:20-cv-06754 & 3:21-cv-07559-WHA Judge William Alsup

BRIEF OF AMICUS CURIAE THE PUBLIC INTEREST PATENT LAW INSTITUTE IN SUPPORT OF APPELLEE

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CERTIFICATE OF INTEREST

Pursuant to Federal Circuit Rules 29(a) and 47.4, counsel for The Public Interest Patent Law Institute certifies that:

- 1. The full name of the *amicus curiae* I represent is: The Public Interest Patent Law Institute.
- 2. The name of the real party in interest (if the party named in the caption is not the real party in interest) I represent is: N/A.
- 3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the *amicus curiae* I represent are: None.
- 4. The names of all law firms and the partners or associates that appeared for the *amicus curiae* I represent or are expected to appear in this Court (and who have not or will not enter an appearance in this case) are: None.
- 5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this Court's decision in the pending appeal: *Sonos, Inc. v. Google LLC*, Fed. Cir. Case No. 2024-1097.

6. All information required by Federal Rules of Appellate Procedure 26.1(b) and 26.1(c) that identifies organizational victims in criminal cases and debtors and trustees in bankruptcy cases is: None.

May 31, 2024

/s/ Phillip R. Malone

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INTEREST OF AMICUS CURIAE

The Public Interest Patent Law Institute ("PIPLI") is a nonprofit, nonpartisan public interest organization dedicated to ensuring the patent system promotes innovation and access for the benefit of all members of the public.^{1, 2}

Many people who contribute to and depend on technological advances do not acquire or assert patents, including researchers, open source technology developers, small businesses, farmers, and patients. These constituencies often have difficulty navigating the patent system and rarely find their interests adequately represented, especially in patent cases between private parties that decide issues affecting their lives. Their absence makes it more difficult for the patent system to strike a balance that promotes innovation effectively and equitably.

PIPLI works to improve the patent system's ability to strike this balance. In service of its mission, PIPLI provides assistance, education, and counseling to people navigating the patent system; conducts policy research; and advocates for the public interest in court and agency proceedings, including by filing *amicus* briefs on

¹ No party's counsel authored this brief in whole or in part, and no party or party's counsel made a monetary contribution intended to fund its preparation or submission. No person other than the *amicus* or counsel contributed money to fund preparation or submission of this brief. This brief is filed with the consent of both parties.

²Amicus thanks Stanford Law School Juelsgaard Intellectual Property and Innovation Clinic Certified Law Students Gregory Schwartz and Lane Miles for substantial assistance in drafting this brief.

consequential issues of patent law and policy. *See, e.g., Amgen Inc. v. Sanofi*, 598 U.S. 594 (2023), *In re Nimitz Techs. LLC*, No. 2023-103, 2022 WL 17494845 (Fed. Cir. Dec. 8, 2022), *United States v. Allergan, Inc.*, 46 F.4th 991 (9th Cir. 2022), *OpenSky Indus., LLC v. VLSI Tech. LLC*, No. IPR2021-01064, 2022 WL 4963049 (P.T.A.B. Oct. 4, 2022).

Members of the public beyond the parties to this case have a strong interest in preserving the doctrine of prosecution laches and the protection it provides. This doctrine protects people who engage in activities or buy products that fall outside the claims of a granted patent for years until the patent's owner obtains new claims with new boundaries but offers no explanation for its delay in filing them. Without this protection, the flexibility given to patent owners to alter the scope of previously granted claims via continuation applications would erode the public's capacity to rely on a patent's claims to determine what is and is not foreclosed. This would have a devastating effect on innovation, competition, and consumers.

As detailed in this brief, the protection provided by the doctrine of prosecution laches is vitally important to independent technology developers, startups, and small businesses because they are most dependent on the clarity of patent claims to minimize risk and avoid litigation. Because claims define a patent owner's rights, they also inform other members of the public what they may—and may not—do without the patent owner's permission. If the doctrine of prosecution laches were to

diminish, so too would the reliability of patent claims in defining a patent owner's rights. This would make it even more difficult for others to determine which activities are permissible, increasing risks that deter research, development, and business. Over time, the result would be more litigation but less innovation—deadweight losses that the public would bear.

The public thus has a strong interest in preserving the doctrine of prosecution laches and the protection it provides for technology creators and users alike.

<u>ARGUMENT</u>

I. The Purpose of a Patent Is to Provide Notice of a Claimed Invention to the Public.

The patent system furthers scientific progress by granting limited exclusive rights to individuals who create and publicly disclose novel inventions. This mutually beneficial exchange of limited exclusivity for public disclosure is the heart of the patent system. But this bargain only works if patents provide reasonably clear notice of what they do and do not claim. If the scope of granted patents becomes too murky or malleable, they will cast a shadow of doubt over the space available for innovation by others, increasing the risk of litigation and deterring the innovation the patent system is meant to encourage.

A. The Public Notice Function of Patent Claims Is Critically Important.

Patents exist "[t]o promote the Progress of Science." U.S. Const. art. I, § 8, cl. 8. By conditioning grants of exclusive rights on the disclosure of new and useful

inventions, the patent system achieves its public purpose by providing private incentives. As such, the Patent Act explicitly requires patent applicants to "particularly point[] out and distinctly claim[]" their inventions. *See* 35 U.S.C. § 112(b). The importance of this requirement cannot be overstated.

The Supreme Court has explained that the patent laws require inventors to describe their work in "full, clear, concise, and exact terms," as part of the "delicate balance the law attempts to maintain between inventors, who rely on the promise of the law to bring the invention forth, and the public, which should be encouraged to pursue innovations, creations, and new ideas beyond the inventor's exclusive rights." Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 731 (2002) (citations omitted). And the Court has emphasized that "[t]he limits of a patent must be known for the protection of the patentee, the encouragement of the inventive genius of others, and the assurance that the subject of the patent will be dedicated ultimately to the public." General Elec. Co. v. Wabash Appliance Corp., 304 U.S. 364, 369 (1938).

While specifications describe and enable others to make and use an applicant's invention, claims define what a patent does and does not cover. *See, e.g.*, *Festo*, 535 U.S. at 731 ("A patent holder should know what he owns, and the public should know what he does not."); *see also Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1997) (recognizing the "definitional and public-notice

functions" of patent claims); *PSC Computer Prod., Inc. v. Foxconn Int'l, Inc.*, 355 F.3d 1353, 1360 (Fed. Cir. 2004) ("The ability to discern both what has been disclosed and what has been claimed is the essence of public notice."). This delineation is critical. If the public cannot distinguish what a patent claims from what it merely discloses, there is neither the notice nor the clarity that innovation requires. *See White v. Dunbar*, 119 U.S. 47, 52 (1886) ("The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.").

The notice that patent claims provide is no mere formality; it is critical to the patent system's ability to foster invention and enterprise. The Supreme Court has recognized that when patents fail to "clearly circumscribe what is foreclosed from future enterprise," they create "[a] zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims," and thus "discourage invention only a little less than unequivocal foreclosure of the field." *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942).

The notice provided by patent claims thus represents both the heart of the patent bargain and a prerequisite for the patent system to fulfill the Constitution's mandate of promoting scientific progress.

B. Equitable Doctrines Protect the Public Notice Function of Patents.

Although the public notice function of claims is critically important, "the nature of language makes it impossible to capture the essence of a thing in a patent application." *Festo*, 535 U.S. at 731. Accordingly, patent owners are given substantial flexibility to transcend the literal bounds of claim language through various mechanisms, including the doctrine of equivalents and continuation applications. These mechanisms, however, are not and must not become limitless. Without limits, they would erode the clarity of patent claims and thus the public's ability to rely on them for notice of a patent's scope.

The Supreme Court has recognized the potential conflict between the public notice function of patent claims and mechanisms that give flexibility to patent applicants. For example, the Court has warned "that the doctrine of equivalents, when applied broadly, conflicts with the definitional and public-notice functions of the statutory claiming requirement." *Warner-Jenkinson*, 520 U.S. at 29. The potential for conflicts with the public notice function of patent claims therefore necessitates limits on mechanisms providing such flexibility. *See id.* at 29–30 ("So long as the doctrine of equivalents does not encroach beyond the limits just described, or beyond related limits[,]... the doctrine will not vitiate the central functions of the patent claims themselves.").

In the doctrine of equivalents context, the limits provided by equitable doctrines, such as prosecution history estoppel and the dedication-disclosure doctrine, play a crucial role in ensuring patents continue to provide adequate public notice. Prosecution history estoppel bars patent holders from recapturing subject matter with the doctrine of equivalents when that subject matter was ceded during patent prosecution. *See id.* at 30. In barring recapture in such circumstances, "prosecution history estoppel places reasonable limits on the doctrine of equivalents, and further insulates the doctrine from any feared conflict with the Patent Act['s]" requirement that a "patentee specifically 'claim' the invention covered by a patent." *Id.* at 25, 34.

Likewise, the dedication-disclosure rule holds that when patentees disclose subject matter but do not claim it, that unclaimed subject matter is dedicated to the public and cannot be recaptured through the doctrine of equivalents. This rule reinforces "the primacy of the claims in defining the scope of the patentee's exclusive right." *Johnson & Johnston Assocs., Inc. v. R.E. Serv. Co.*, 285 F.3d 1046, 1054 (Fed. Cir. 2002) (en banc). For example, in *PSC*, this Court recognized the possibility that the doctrine of equivalents could undermine the public notice function of patent claims—"[w]ere the patentee allowed to reclaim some specifically-disclosed-but-unclaimed matter under the doctrine of equivalents, the public would have no way of knowing which disclosed matter infringed and which

did not"—and emphatically warned that "[s]uch a reclamation would eviscerate the public notice function of patents and create uncertainty in the law." *PSC*, 355 F.3d at 1360.

While language is limited, so is the flexibility afforded to patent owners because of it. When that flexibility threatens the reliability of patent claims, equitable doctrines are especially appropriate mechanisms for ensuring claims can fulfill their primary function—defining a patent owner's rights.

C. Prosecution Laches Is an Essential Limit on Patent Claims Acquired After Unreasonable Delays and Asserted to Prejudicial Effect.

Like prosecution history estoppel and the dedication-disclosure rule, prosecution laches serves as an equitable check on the flexibility provided to patent owners. While prosecution history estoppel arises from statements made to obtain patents, prosecution laches arises from unreasonable delays in obtaining patents that would be prejudicial to overlook.

Prosecution laches is especially critical in mitigating and remedying abuses of continuation applications because these applications are, by definition, filed later in time than other patent applications to which they are related. *See generally* Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 B.U. L. Rev. 63, 65 (2004) (recognizing the role of prosecution laches in "mitigat[ing] some of the worst abuses of the continuation [application] process"). Continuation applications contain new claims but rely on earlier-filed applications for their

priority dates and written description. 35 U.S.C. § 120; see, e.g., Symbol Techs., Inc. v. Lemelson Med., Educ. & Rsch. Found., 429 F.3d 1051, 1052 (Fed. Cir. 2005); see also Lemley & Moore, supra, at 66–71. Critically, there are no statutory limits on the timeliness of continuation applications. See Br. for the Nat'l Retail Fed. as Amicus Curiae Supporting Appellee [hereinafter Br. for Nat'l Retail Fed.] at 16 ("[N]o statutory time limit governs seeking enlarged claims in a continuing application.").

Prosecution laches is an especially important doctrine because there are so few limits on continuation patents. There is no limit on the timeliness or number of continuation applications that patentees can file so long as they keep an application pending that is related to the filing with the earliest priority date. *See* 35 U.S.C. § 120; Lemley & Moore, *supra*, at 68. Substantively, the only limit on continuation applications is that they must claim subject matter that the applications from which they derive priority describe and enable. Lemley & Moore, *supra*, at 77; *see also Symbol Techs.*, 429 F.3d at 1052.

While continuation applications do not give applicants "carte blanche to rewrite their claims . . . [i]f the patentee can find some support in the original patent application for the current claims, [they] can obtain legal rights over ideas that . . . never occurred to [them] until [they] saw what others were already doing." Lemley & Moore, *supra*, at 77. As such, continuation applications give patent owners

substantial flexibility that, without limits, can undermine the clarity of patent claims, and thus of the notice they must provide. *See id.* at 100 n.153 (arguing that strong limits on continuation applications are consistent with the courts' repeated emphasis on the importance of public notice).

Permitting continuation applications to capture everything disclosed in an earlier-filed application, regardless of time, reason, or prejudice, would vitiate the key distinction between a patent's claims and its specification—namely, that "claims claim," and "specifications teach." *SRI Int'l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 n.14 (Fed. Cir. 1985). This distinction, prescribed by statute and enshrined in precedent, requires "that '[c]laims, not the specification embodiments, define the scope of protection." *Dow Chem. Co. v. Sumitomo Chem. Co.*, 257 F.3d 1364, 1378 (Fed. Cir. 2001) (citation omitted).

Moreover, giving patent owners unfettered discretion to obtain new claims with old priority dates via continuation applications would risk that the patent system impedes innovation rather than spurs it. "As commentators have noted, the patent system must balance encouraging pioneering inventions and encouraging improvements. Strategic claim changes may hold-up legitimate improvers or independent inventors, reducing their ability and incentive to innovate." Lemley & Moore, *supra*, at 78–79 (citations omitted).

Because continuation applications allow patent owners to claim developments arising after the priority dates on which their applications rely, they exacerbate the danger that strategic changes to the scope of a patent owner's rights will undermine the patent system by "bring[ing] about an undue extension of the patent monopoly." Webster Elec. Co. v. Splitdorf Elec. Co., 264 U.S. 463, 466 (1924). Given the absence of other limitations on continuation applications, prosecution laches fulfills a critical and otherwise unmet need for safeguards on continuations that are filed after unreasonable delays and asserted to prejudicial effect.

This safeguard remains vital even after changes made to the terms of granted patents in the Uruguay Round Agreements Act ("URAA"). Uruguay Round Agreements Act § 532, 35 U.S.C. § 154(a). Those changes mandated that continuation applications expire on the same date as the patents from which they derive priority. *Id.*; *see* Lemley & Moore, *supra*, at 80. They did not address or eliminate potential conflicts between the flexibility afforded by continuation practice and the public notice function of patent claims. As such, they do not address the concerns that prosecution laches does because those concerns arise from unreasonably delayed and prejudicial expansions of an existing patent's *scope*. *See* Br. for Nat'l Retail Fed. at 11–12 ("[Prosecution] laches can apply in any case in which the patentee has unreasonably and without explanation enlarged its claims to the prejudice of the public."). These concerns are distinct and independent from

those URAA addressed, which arise from unwarranted extensions of a patent's *term*. Prosecution laches therefore remains an essential and singular safeguard against abuses of continuation practice.

In other contexts, this Court has recognized that the URAA's changes to patent terms did not obviate the need for pre-existing doctrines that protect the public from undue expansions of patents rights. For example, in *AbbVie Inc. v. Mithilda & Terence Kennedy Inst. of Rheumatology Tr.*, 764 F.3d 1366 (Fed. Cir. 2014), this Court rejected the argument that the URAA eliminated the doctrine of obviousness-type double patenting. As the Court explained, that doctrine has a broader purpose than the URAA amendments: it "is designed to prevent an inventor from securing a second, later expiring patent for the same invention." *Id.* at 1373. Because "[t]hat problem still exists," so does the need for the doctrine. *Id.*

So too here. Even after these changes to patent terms, continuation patents allow their owners to obtain new claims on subject matter disclosed in older applications, without regard to the passage of time, the rationale for the delay, or the impact of issuance on people who have spent years making or using products that would infringe the new claims. Because "[t]hat problem still exists," so does the need for prosecution laches. *Id*.

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II. The Public Has a Strong Interest in Ensuring Prosecution Laches **Continues to Prevent the Enforcement of Patent Claims Obtained After** Unreasonable Delays and Asserted to Prejudicial Effect.

If district courts cannot apply prosecution laches in cases involving conduct of the kind that occurred here, the bar for its application would be too high for it to have a meaningful effect in practice. Applying prosecution laches here ensures the doctrine is available when patent owners wait for years to file claims on publicly available subject matter while keeping their applications hidden from public view.³ The District Court's application of the doctrine was a sound exercise of discretion that will ensure justice in this case while enabling the patent system to foster an ecosystem in which small businesses and independent technology developers can create, compete, and thrive.

A. Appellant's Delayed Filing and Secret Application Were Unreasonable.

The prosecution of the patent claims at issue was egregiously unreasonable.⁴ Thirteen years passed between the filing of the Appellant's original application and

³ Amicus focuses on the issue of prosecution laches both because the public's interest in the doctrine is so great and because its application is only more appropriate in light of the District Court's findings in this case, including that Appellant omitted

the disclosures relied on to support its later-filed claims from its original application and added them only with the later filing. See Appx83. Such conduct can hardly

justify an exemption from an equitable doctrine.

⁴ Prosecution laches requires finding that the applicant's "unreasonable and unexplained" delay in prosecution "prejudice[d]" others. See Hyatt v. Hirshfeld, 998 F.3d 1347, 1360 (Fed. Cir. 2021). Given the compelling evidence supporting the District Court's finding of prejudice to Appellee, see Appx82–84, this Brief focuses

filing of these claims. Appx79-80. During that time, multiple different products with the late-claimed features were designed, built, and disseminated to the public. Appx71. Yet, for most of that time (seven years), the priority-conferring application was unpublished and therefore *not* available to the public. Appx66. As such, neither product developers nor consumers could have known that those features might be withdrawn from the public domain and claimed in a later continuation application.

Thirteen years is an egregiously long delay, despite Appellant's contention to the contrary. Opening Br. for Appellant Sonos Inc., at 33–34. As a landmark study found, "the median amount of time patents spend in prosecution from their earliest filing date to issuance is 2.04 years; the mean is 2.4." Lemley & Moore, *supra*, at 113. In light of this data, the study's authors recommended that a presumption of prosecution laches arise when eight years pass between the filing of the application providing priority and the issuance of later-filed claims. *Id*.

Permitting enforcement of the claims in this case would be especially unjust given the secrecy shrouding the application from which those claims derive priority. For seven years, the public was denied access to the application due to the patent owner's request for nonpublication. Appx66. Amendments in 2000 requiring default

on the prejudicial effect of Appellant's prosecution conduct, including its unreasonable and unexplained delay, on people and organizations beyond the parties to this case.

publication of patent application were specifically designed to give the public notice of relevant patent claims *before* their issuance.⁵ *See* Domestic Publication of Foreign Filed Patent Applications Act of 1999 § 4502, 35 U.S.C. § 122. But the patent owner's nonpublication request deprived the public of such notice in this case.

The fact that Appellant did not violate statutory provisions or USPTO regulations by waiting thirteen years to file claims or requesting nonpublication does not undermine the District Court's discretion to apply equitable limits on the enforceability of those claims. As scholars have observed, prosecution laches "is an equitable defense and therefore ought to apply even where a patentee did not violate the letter of the law, but where equity would dictate that the unreasonable delay renders the patent unenforceable." Lemley & Moore, *supra*, at 116.

The egregious nature of the delay in this case makes it unlikely that an affirmance would disturb continuation practice. The relevant continuation application was filed so many years after the parent application that it stands out from the vast majority of continuation applications, 90% of which are filed within a decade of their priority date. *See* Br. for the George Washington University Law School Intellectual Property and Technology Law Clinic as Amicus Curiae

⁵ "Patent applications filed before 2000 were kept secret unless and until they issued as patents. As a result, competitors could not know whether patent applications were pending that might cover their products. The passage of time might reduce the risk that a patent would be issued covering a particular technology, but it could never eliminate that risk." Lemley & Moore, *supra*, at 73.

Supporting Appellant [hereinafter Br. for GW IP Clinic], at 8 (noting that only 53,719 out of 671,966 patents granted from continuation applications from 2014-2023 had a filing date more than a decade after their priority date).

Moreover, it is rare for applicants to opt out of publication: fewer than 10% of applications remain unpublished after 18 months. *See* Stuart Graham & Deepak Hegde, *Disclosing Patents' Secrets*, 347 Science 236 app. at 8 tbl.S1 (2015). And while applicants often delay prosecution to find out whether an invention is "commercially valuable," Br. for GW IP Clinic, *supra*, at 12 (citation omitted), Appellant knew that the technology was embedded in widely available products for more than five years before claiming it. Appx71. These circumstances distinguish the claims in this case from most claims in continuation patents and confirms the doctrine will only apply when unreasonable delay and prejudice are present. Failing to apply it, however, could disturb continuation practice by giving other patent owners carte blanche to follow Appellant's example by using nonpublished applications to support long-delayed claims.

Indeed, courts have been applying the doctrine to similar prosecution conduct for over a century. For example, in 1924 the Supreme Court held a patent unenforceable after an applicant waited eight years to file a divisional patent application and claim new subject matter. *Webster*, 264 U.S. at 465. In doing so, the Court emphasized that the applicant's decision to "simply st[and] by and wait[]"—

rather than claim the inventions sooner—was particularly unreasonable because "the[] subject-matter [of the claims] was . . . in general use." *Id.* Cases like the one here, with decade-long delays and widespread use of the later-claimed invention, fit comfortably into the *Webster* mold. *Id.*; *see Personalized Media Commc'ns, LLC v. Apple Inc.*, 57 F.4th 1346, 1352 (Fed. Cir. 2023) (applying prosecution laches where the applicant "hid[] its technologies, quietly monitor[ed] infringement, and roll[ed] out patents over time").

B. Small Businesses and Independent Inventors Are Most Dependent on the Public Notice that Patent Claims Provide and Most Vulnerable to Long-Delayed Claims Such as These.

Small businesses and independent inventors are a key part of America's innovation ecosystem. A "disproportionate number" of the most important technological advances "started in the minds of small-scale, independent inventors." Joe Matal, *The Importance of Independent Inventors to America—and America's Economy*, U.S. Pat. & Trademark Off.: Dir.'s F. Blog (Nov. 8, 2017, 11:00 AM) [https://perma.cc/M2QK-Z6WP]. The protection that prosecution laches provides is most critical to these kinds of small entities.

Scholars have found that continuation applications are more likely to be used by large corporate patentees than "smaller pioneering inventors." Deepak Hegde et al., *Pioneering Inventors or Thicket Builders: Which U.S. Firms Use Continuations in Patenting?*, 55 Mgmt. Sci. 1214, 1222 (2009); *see also* Cesare Righi et al.,

Continuing Patent Applications at the USPTO, 52 Rsch. Pol'y Art. 104742, at 2 (2023) (finding the same). Notably, "a particular type of applicant with strong incentives to delay claim drafting to achieve advantages in patent licensing and assertion are IP-producing Patent Assertion Entities (PAEs)," which, unsurprisingly, rely heavily on continuation applications. Righi et al., *supra*, at 5.

While big companies and PAEs may benefit from permissive continuation practices, small businesses, independent developers, and others with limited resources are extremely vulnerable to the costs that long-delayed claims can impose. As the USPTO recognizes, these constituencies are particularly sensitive to the financial costs of the patent system. *See USPTO Fee Schedule*, U.S. Pat. & Trademark Off. (May 3, 2024) [https://perma.cc/MWH5-DQRR] (offering reduced filing fees for small and micro entities).

Importantly, the brunt of these costs is imposed through litigation, not patent prosecution. The costs of responding to infringement allegations are far greater than the cost of obtaining and maintaining a patent. On average, the total cost to file and maintain a U.S. patent is between \$20,000 and \$25,000 (and potentially far less for small entities eligible for reduced fees), while the cost of a low stakes patent case in 2019 was about \$700,000 in court and \$250,000 at the Patent and Trial Appeal Board. See Anthony De Andrade & Venkatesh Viswanath, Estimating the Cost for Filing, Obtaining and Maintaining Patents Across the Globe, IPWatchdog,

(Aug. 28, 2016, 6:45 AM) [https://perma.cc/6FXN-BFGM]; Am. Intell. Prop. Law Assoc., *Report of the Economic Survey* 50, 52 (2019), available at https://perma.cc/WN3C-CRJK. Because the doctrine does not alter routine continuation practice, retaining prosecution laches will not increase an applicant's cost of obtaining a patent. *Contra* Br. for GW IP Clinic at 15–20. It only requires that applicants avoid adding claims unreasonably late and asserting them prejudicially.

Removing prosecution laches, however, will increase the risk of liability and litigation for everyone. And this risk will be greatest for the small businesses with limited resources that PAEs frequently target. *See* Exec. Off. of the President, *Patent Assertion and U.S. Innovation* 7 (2013) [https://perma.cc/L84H-DLLA]. It will also be greatest for companies on the brink of successful major funding events like initial public offerings, when legal uncertainty can have an outsized impact on a company's future. Robin Feldman & Evan Frondorf, *Patent Demands and Initial Public Offerings*, 19 Stan. Tech. L. Rev. 52, 87 (2015).

The burdens on small entities would be especially great in cases such as this one, where claims prosecuted with unreasonable delay rely on disclosures in appendixes to unpublished patent applications. Appx66, 83. Small businesses would be forced to spend their limited resources on what the District Court described as an "exercise in archeology," Appx82, all in hopes of predicting what claims may appear

many years after an application is filed. Such expensive scrutiny is burdensome and disruptive, diverting funds from productive activities like research towards potentially futile attempts to find a needle in a sea of haystacks. The District Court's decision ensures, rightly, that the patent system encourages investment in new innovations instead.

C. Preserving the Longstanding Doctrine of Prosecution Laches Will Preserve Positive Trends in U.S. Innovation and Economic Growth.

The Supreme Court has applied equitable doctrines, including prosecution laches, to prevent the "undue extension of the patent monopoly against private and public rights" for at least a century. Webster, 264 U.S. at 466. These doctrines have been a part of the patent system in recent years as well as during the period from the late nineteenth to the early twentieth century considered the "golden age" of American innovation. Ufuk Akcigit, John Grigsby & Tom Nicholas, When America Was Most Innovative, and Why, Harv. Bus. Rev. (Mar. 6, 2017) [https://perma.cc/2VQV-9PMZ]. While other amici express concerns about the patent system's current "strength," see Br. for the Alliance of U.S. Startups & Inventors for Jobs as Amicus Curiae Supporting Appellant [hereinafter Br. for USIJ], at 4, 16-19, such concerns are both irrelevant and unfounded.

First, policy concerns alone, even if supported and compelling, are not enough to justify overturning this Court's precedent confirming that prosecution laches is a viable defense. *See, e.g.*, *PMC*, 57 F.4th at 1346. It is the law. Complaints about the

evolution of patent law over the past two decades may justify congressional or administrative action but cannot overcome the command of stare decisis.

Second, prosecution laches strengthens the quality and reliability of the patent system. During prosecution, no matter how flawed a patent application is, "[t]here is no way an examiner can ever cause a determined [patent] applicant to go away, although allowing the applicant's patent claims increases the chance that the case will finally be disposed of." Lemley & Moore, *supra*, at 68. This gives examiners a powerful incentive to grant applications even if they fall short of the Patent Act's requirements.

In addition, a patent issued from a long-pending family—with claims whose prosecution was unreasonable and unexplained—could be asserted against inventors who relied on the scope of previously granted claims in the family. Prosecution laches can ensure that these investors do not suffer for relying on existing patent claims to discern the metes and bounds of a patent owner's rights. In doing so, the doctrine strengthens the patent system. For that reason, scholars have proposed establishing a (rebuttable) presumption of prosecution laches that arises whenever an application's pendency lasts more than eight years. Lemley & Moore, *supra*, at 113. While such a change is not at issue here, this proposal underscores the value of prosecution laches to the functioning of the patent system.

Third, no evidence from the past twenty years suggests that changes in patent protection have negatively affected investments in domestic innovation. Contra Br. for USIJ at 17–18. To the contrary, data from the Organisation of Economically Developed Countries shows that research and development intensity in the U.S. has increased by nearly 40% over the past two decades. See Org. of Economically Developed Countries, Main Science and Technology Indicators, Volume 2022 Issue 2, at 11 (2022), available at https://perma.cc/JWF5-6XTA (showing an increase from 2.5% of GDP in 2005 to 3.46% of GDP in 2021). Research and development intensity is an important "gauge of innovative activity" that captures research spending as a share of GDP. Kristie M. Engemann, How Is Innovation Measured?, Louis: Fed. Rsrv. Bank of St. Open Vault Blog (June 9, 2021) [https://perma.cc/VA5U-PM35] (explaining research and development intensity). Much of that U.S. growth of is attributable to private investment in research, which increased by over nearly 50%. See Org. of Economically Developed Countries, supra, at 20.

As a result, the United States continues to lead the way in creating the critical technologies of the future, like artificial intelligence (AI). For example, more than "70% of the AI papers cited most since 2020 are authored by researchers from institutions and organizations in the U.S." *US Leads World on Gen AI Investment,*

Innovation and Implementation, PYMNTS (Oct. 24, 2023) [https://perma.cc/7P8Z-8D3M].

Evidence shows that the patent system supports our country's position as a global leader in innovation. Eliminating or diminishing the doctrine of prosecution laches would for the first time expose technology creators and users to uncertainty and risk that, because of precedents of this Court and the Supreme Court, they have never before faced. Neither authority nor reason justifies creating new impediments to innovation that the patent system is supposed to promote.

CONCLUSION

Applying prosecution laches in cases of unreasonable and unexplained delay with prejudicial effect is critical to ensure the patent system provides adequate notice to the public. *Amicus* respectfully urges the Court to affirm.

May 31, 2024 Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on May 31, 2024, I caused the foregoing BRIEF OF *AMICUS CURIAE* THE PUBLIC INTEREST PATENT LAW INSTITUTE IN SUPPORT OF APPELLEE to be served by electronic means via the Court's CM/ECF system on all counsel registered to receive electronic notices.

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATIONS

I hereby certify as follows:

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